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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|--|-------------|----------------------|---------------------|------------------|--|
| 10/563,412   | 01/03/2006  | Ichihiko Takahashi   | 05866/LH            | 4511             |  |
| 1933 7590 11/30/2009<br>FRISHAUF, HOLTZ, GOODMAN & CHICK, PC |             |                      | EXAMINER            |                  |  |
| 220 Fifth Avenue   |             |                      | HONG, JOHN C        |                  |  |
| 16TH Floor<br>NEW YORK, NY 10001-7708                        |             | ART UNIT             | PAPER NUMBER        |                  |  |
|  |             |                      | 3726                |                  |  |
|  |             |                      |                     |                  |  |
|  |             |                      | MAIL DATE           | DELIVERY MODE    |  |
|  |             |                      | 11/30/2009          | PAPER            |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | Applicant(s)   |  |  |  |  |
|--|---|--|--|--|--|--|
|  | 10/563,412  | TAKAHASHI ET AL.   |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |  |
|  | JOHN C. HONG  | 3726   |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | pears on the cover sheet with the c   | orrespondence address  |  |  |  |  |
| · ·  | / IO OFT TO EVENE A MONTH!  | 0) OD THIDTY (00) BANG   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status   |   |  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>06 O</u>  | ctober 2009.  |  |  |  |  |  |
|  | action is non-final.  |  |  |  |  |  |
| 3) Since this application is in condition for allowar  | · <del>_</del>  |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |   |  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |
| 4)⊠ Claim(s) <u>5-10</u> is/are pending in the application.  |   |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>5-10</u> is/are rejected.  |   |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  | 7) Claim(s) is/are objected to.   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/o   | r election requirement.   |  |  |  |  |  |
| Application Papers   |   |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.  |   |  |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |  |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | caminer. Note the attached Office   | Action or form PTO-152.  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |   |  |  |  |  |  |
| a)⊠ All b)⊡ Some * c)⊡ None of:  |   |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |  |  |  |  |  |
|  |   |  |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)   | 4) Interview Summary  | (PTO_413)  |  |  |  |  |
| 2) Notice of References Cited (PTO-992)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da   | ate  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>1/3/06</u> .   | 5)  | atent Application  |  |  |  |  |

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2. Claims 5-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - (1) Claim 1, line 11, "particles grind the base material" is not understood. How can the particles grind the base material?
  - (2) Claim 9, line 5, "particles having diameters of 2m to 40 m" is not understood.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP70005599.
- '599 teaches a paste to be applied to a desired portion of a base material for at least one of restraining fatigue crack growth in the base material and detecting fatigue crack in the base material (Abstract)
- '599 fails to teach said paste comprising: particles having diameters of 2 m to 40 m; and an oil having viscosity of 5,000 centipoises to 15,000 centipoises; wherein the particles and the

oil are mixed with each other and the particles comprise light-colored ceramics including white ceramics.

But it is well known in the art to make paste with particles including white ceramics with certain diameter and oil having certain viscosity, and It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize these known paste on the '599 so as to detect the cracks in metal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN C. HONG whose telephone number is 571-272-4529. The examiner can normally be reached on M-F 9:00-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID BRYANT can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN C HONG/ Primary Examiner, Art Unit 3726 Application/Control Number: 10/563,412 Page 4

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Jh 11/23/09